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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/643,515 | 08/19/2003 | John Russell | 11306-116002 | 4506 |

26191 7590 01/10/2006

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| EXAMINER | |
|---|---|
| FAISON, VERONICA F | |
| **ART UNIT** | **PAPER NUMBER** |
| 1755 | |

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/643,515 | RUSSELL ET AL. | |
| | Examiner | Art Unit | |
| | Veronica F. Faison | 1755 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,38-51 and 54-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2,38 and 57-60* is/are allowed.

6)☒ Claim(s) *1,39-45,47,48 and 51-56* is/are rejected.

7)☒ Claim(s) *46,49 and 50* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 39, 41-44, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 462 093.

EP 0 462 093 teach confectionary products that are printed with an edible ink that is preformed by directly or indirectly printing. The ink composition comprises at least a solvent, a suspended pigment, a sugar and a surfactant and preferably also lipophilic substance and an emulsifier (abstract). The reference further teaches that the confectionary products include chocolate truffles and biscuits (page 5 lines 3-4). The printing technique is transferred during the successive printing steps, from the cliché to the pad and deposited onto the confectionary product (page 5 lines 27-29). The reference discloses that a thin ink layer of about 10 to 50 $\mu$ (page 5 lines 39-41). The surfactant is polyoxyethylene sorbitan monostearate or Polysorbate 60, polysorbates accelerate the drying process (page 5 lines 47-52) and polyoxyethylene sorbitan monostearate or Polysorbate 60 may also act as the emulsifier (page 6 lines 15-18).

The ink composition may also comprise an adhesive to improve the adhesion of the ink, particularly cacao butter that also provides better transfer of the ink (page 6 lines 2-14). Table 1 and the claim 11 disclose specific amounts of ink components that overlap Applicant's claimed range. The reference remains silent to the viscosity of the ink composition.

When general conditions (viscosity and layer thickness) are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by changing the size, shape, proportion of shape, degree and sequence of added ingredients through routine experimentation. (In re Rose, 105 USPQ 137; In re Aller 220F, 2d 454, 105 USPQ 233,235 (CCPA 1955); In re Dailey et al., 149 USPQ 47; In re Reese, 129 USPQ 402; In re Gibson, 45 USPQ 230). The reference teaches that direct and indirect printing processes may be used. Therefore one of ordinary skill in the art would conclude that the viscosity is adjustable to be suitable for a particular printing process, which may include Applicant claimed range because the ink composition taught by the reference is similar that claimed by Applicant, absence tangible evidence to the contrary.

EP 0 462 093 and the claims differ in that EP 0 462 093 does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by EP 0 462 093 overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed

ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

> "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Claims 1, 39, 41, 42, 44, 45, 54, 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2 397 276 in view of Osada et al (US Patent 5,070,230).

GB 2 397 276 teach a comestible product, i.e. a chocolate bar or a chocolate coating for a cake, wherein an image is formed by screen printing using an edible ink composition. The edible ink composition comprises a mixture of fondant icing sugar, Polysorbate 60, glycerin, lecithin and water (abstract). The reference further teaches in a specific example that the fondant icing sugar is present in the amount of 73.341 percent by weight, Polysorbate 60 is present in the amount of 1.466 percent by weight, glycerin is present in the amount of 0.293 percent by weight, lecithin is present in the amount of 4.399 percent by weight and water is present in the amount of 20.528 which overlap Applicant claimed ranges (page 5 lines 15-22). The reference remains silent to the viscosity of the ink composition.

When general conditions (viscosity and layer thickness) are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by changing the size, shape, proportion of shape, degree and sequence of added ingredients through routine experimentation. (In re Rose, 105 USPQ 137; In re Aller 220F, 2d 454, 105 USPQ

233,235 (CCPA 1955); In re Dailey et al., 149 USPQ 47; In re Reese, 129 USPQ 402; In re Gibson, 45 USPQ 230). The reference teaches that screen printing processes may be used. Therefore one of ordinary skill in the art would conclude that the viscosity is adjustable to be suitable for a particular printing process, which may include Applicant claimed range because the ink composition taught by the reference is similar that claimed by Applicant, absence tangible evidence to the contrary.

GB 2 397 276 and the claims differ in that GB 2 397 276 does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by GB 2 397 276 overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

> "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Osada et al teach the viscosity of a screen printable composition is within the range of 1,000 to 20,000 centipoise (col. 4 lines 42-45).

Therefore it would have been obvious to one of ordinary skill in the art that the ink viscosity of GB 2 397 276 would be in Applicant's claimed range, because Osada et al teaches that the viscosity of screen printable compositions are within the range that overlaps Applicant's claimed range.

Claims 40, 47, 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2 397 276 in view of Hoy (US Patent 6,063,412) and in further view of Osada et al (US Patent 5,070,230).

GB 2 397 276 is described above, but fails to teach lithographic printing.

Hoy teaches an edible greeting card for ingestion (abstract). The reference further teaches that an edible ink wherein the colorant was a nontoxic coloring agent. The ink composition may be printed with a variety of printing techniques that included silk screening, lithography, laser imprinting and embossing (col. 4 lines 55-65). The reference fails to teach the viscosity of the composition.

Osada et al teach the viscosity of a screen printable composition is within the range of 1,000 to 20,000 centipoise (col. 4 lines 42-45).

Therefore it would have been obvious to one of ordinary skill in the art that the ink viscosity of GB 2 397 276 would be in Applicant's claimed range, because Osada et al teaches that the viscosity of screen printable compositions are within the range that overlaps Applicant's claimed range

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced screen printing with

lithographic printing because the substitution of art recognized equivalents as shown by Hoy would have been within the level of ordinary skill in the art.

***Allowable Subject Matter***

Claims 2, 38 and 57-60 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

1. The Examiner is relying upon Applicant's arguments for the patentability of the instant claims, specifically Applicant's argument that Ahn teaches viscosity of the liquefied sugar component should be 50-90 Brix, however the 90 Brix solution has a viscosity of less than about 20 cp using the test method described in the application, even when the 90 Brix sugar solution was combined with maximum suggested concentration of TiO2, the viscosity of the ink base was only about 500 cp was found persuasive and therefore the rejection of the claims has been withdrawn.
2. an edible ink composition comprising a pigment density of about 0.1 g/l to about 0.25 g/l and an ink density of about 1.1 g/l to about 2.0 g/l.

Claims 46, 49 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The references alone or in combination fail to teach an edible ink composition with the specific composition set forth in claims 46 and 50 in view of the rest of the claim limitation of the independent claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF
12-29-05